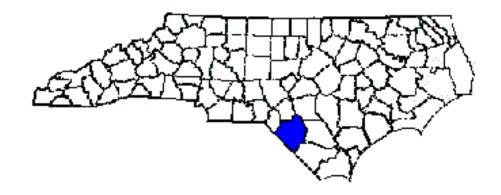
## **ANNUAL REPORT FOR 2008**



Shoe Heel Creek Mitigation Site Robeson County TIP No. B-4248



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### TABLE OF CONTENTS

SUMN	//ARY	,	1
1.0	Intro .1 .2 .3	duction Project Description Purpose Project History	2 2
2.0	Vegetation:		
	.1 .2 .3 .4	Success Criteria  Description of Species  Results of Vegetation Monitoring  Conclusions.	3 3
3.0	Overall Conclusions and Recommendations		3
		<u>FIGURES</u>	
Figure	1 – 5	Site Location Map	4

### **APPENDICES**

Appendix A – Site Photos

### SUMMARY

The Shoe Heel Creek Mitigation Site is located in Robeson County. The site was planted in March 2006 and was designed as mitigation for wetland impacts associated with bridge project B-4248.

The mitigation encompasses approximately 0.16 acres of wetland restoration. The restoration effort involved the removal of the old existing roadway fill and monitoring the area to ensure that it re-attains wetland jurisdictional status. Hydrologic monitoring is not required for this project; however, vegetation monitoring is required for three years.

The site grading limits were adjusted slightly after meeting on-site with the Army Corps of Engineers. The adjustment was made to preserve mature baldcypress trees located onsite.

After the third year of monitoring, the Shoe Heel Creek site shows by visual observation that the planted species are surviving and that the impacted area is re-attaining wetland jurisdictional status.

NCDOT proposes to discontinue vegetation monitoring at the Shoe Heel Creek Site.

### 1.0 INTRODUCTION

### 1.1 Project Description

The Shoe Heel Creek Mitigation site is located at Bridge No. 170 on SR 1101 (Figure 1). The site consists of approximately 0.16 acres of mitigation for wetland impacts associated with project B-4248.

### 1.2 Purpose

In order for a mitigation site to be considered successful, a site must meet vegetation success criteria. This report details the vegetation monitoring in 2008 at the Shoe Heel Creek Mitigation Site. Hydrologic monitoring was not required for the site.

### 1.3 Project History

March 2006	Site planted
July 2006	Vegetation Monitoring (1 year)
July 2007	Vegetation Monitoring (2 year)
July 2008	Vegetation Monitoring (3 year)

# 2.0 VEGETATION: SHOE HEEL CREEK MITIGATION SITE (YEAR 3 MONITORING)

#### 2.1 Success Criteria

Success Criteria states that the impacted area where the old existing roadway fill was removed shall be replanted using native species and must re-attain wetland jurisdictional status at the end of three years.

### 2.2 Description of Species

The following wetland species were planted in the Wetland Restoration Area:

Taxodium distichum, Baldcypress

Nyssa sylvatica var. biflora, Swamp Blackgum

### 2.3 Results of Vegetation Monitoring

The impacted area where the old existing roadway fill was removed and revegetated is re-attaining wetland jurisdictional status and the planted species are surviving.

**Site Notes**: Other species noted include: red maple, fennel, goldenrod, ragweed, cattails, *Scirpu*s sp., lespedeza, tulip poplar, pine, *Juncus* sp., wax myrtle, and various grasses.

#### 2.4 Conclusions

There were approximately 0.16 acres of wetland restoration planted on site. There were no vegetation plots established on the site. By visual observation, the Shoe Heel Creek site shows that the planted species are surviving and that the impacted area is re-attaining wetland jurisdictional status.

### 3.0 OVERALL CONCLUSIONS AND RECOMMENDATIONS

NCDOT proposes to discontinue vegetation monitoring at the Shoe Heel Creek Site.

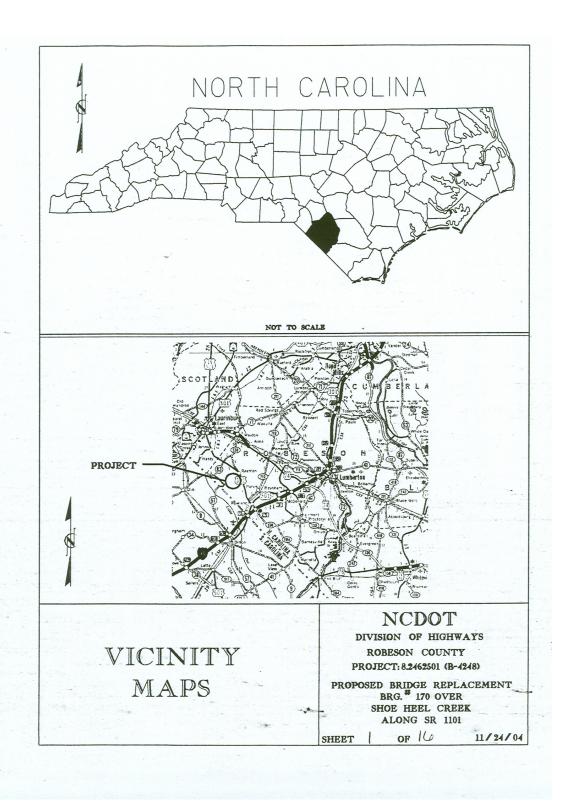


Figure 1. Site Location Map

# APPENDIX A SITE PHOTOS

# Shoe Heel Creek



Photo 1



Photo 2